

# Ex. 6 - Personal Privacy

**From:** Engelking, Pat (MPCA)  
**Sent:** Wed 7/15/2015 5:41:27 PM  
**Subject:** FW: Productive Meeting Yesterday  
[ECsubscript.pptx](#)

FYI. Additional follow-up from yesterday's meeting from Joe Mayasich.

Pat

Patricia Engelking

Environmental Analysis and Outcomes

Minnesota Pollution Control Agency

651-757-2340

[pat.engelking@state.mn.us](mailto:pat.engelking@state.mn.us)

**From:** Joe Mayasich [mailto:Joe.Mayasich@wlssd.com]

**Sent:** Wednesday, July 15, 2015 11:26 AM

**To:** Lotthammer, Shannon (MPCA); Kessler, Katrina (MPCA); Monson, Phil (MPCA); Swain, Ed (MPCA); Engelking, Pat (MPCA)

**Subject:** Productive Meeting Yesterday

It was indeed (in my opinion). I thank you for facilitating effectively.

I have given the EC subscript level more thought because it is now, and will continue to be, very influential. I was not much good at geometry, but I have applied it crudely to try to get an important point across with the attached slide. As I had indicated yesterday, I fully agree that the EC approach (vs. NOEC, LOEC) is correct; however, I did not come away yesterday with adequate technical/quantitative reassurance that 10 is the appropriate subscript. If the use of 10 will be MPCA policy, as alluded to at the meeting, then that (policy) becomes debatable outside of scientific disciplines; does it not?

Lastly, I'd like to follow-up with more discussion on transforming (via arcsine) the percentages before the binary logistic regressions are performed. The raw data are "discrete" not "continuous" because waters are scored and tallied according to rice presence or absence; not measured on a scale and recorded. The percentages are calculated from the presence/absence count data; are they not? Therefore, pre-analysis arcsine transformation of the percentages should be seriously considered unless the assumptions of the binary logistic regression can be met without performing such a transformation.

Please share all or portions of this communication as you deem appropriate. I hope that my input is helpful.

Joe M. Mayasich, Ph.D.

Director of Environmental Services

Western Lake Superior Sanitary District

2626 Courtland St.

Duluth, MN 55806-1894

[Joe.mayasich@wlssd.com](mailto:Joe.mayasich@wlssd.com)

(218) 722-3336 ext.306

Direct Line (218) 740-4806

FAX (218) 727-7471